

AMENDMENT TO THE CLAIMS

Please rewrite the claims as follows:

Claims 1-27 (Canceled).

28. (Original) A semiconductor substrate fabrication method, comprising:

the step of forming a non porous layer on a porous layer formed on a surface of a first substrate;

the step of bonding a first substrate side of a prospective structure and a second substrate prepared separately to sandwich said non porous layer between the first substrate side and said second substrate;

the removal step of removing said first substrate from the bonded structure to expose said porous layer on a second substrate side thereof; and

the etching step of etching said porous layer while the second substrate side on which said porous layer is exposed is completely dipped into an etching solution, and ultrasonic waves are supplied, thereby exposing surface of the second substrate side,

the etching step rotating the second substrate side.

29. (Original) A semiconductor substrate fabrication method, comprising:

the step of forming a non porous layer on a porous layer formed on a surface of a first substrate;

the step of bonding a first substrate side of a prospective structure and a second substrate prepared separately to sandwich said non porous layer between the first substrate side and said second substrate;

the removal step of removing said first substrate from the bonded structure to expose said porous layer on a second substrate side thereof; and

the etching step of etching said porous layer while the second substrate side on which said porous layer is exposed is completely dipped into an etching solution, and ultrasonic waves are supplied, thereby exposing surface of the second substrate side,

the etching step rotating and vertically moving the second substrate side.

30. (Original) A semiconductor substrate fabrication method, comprising:

the step of forming a non porous layer on a porous layer formed on a surface of a first substrate;

the step of bonding a first substrate side of a prospective structure and a second substrate prepared separately to sandwich said non porous layer between the first substrate side and said second substrate;

the removal step of removing said first substrate from the bonded structure to expose said porous layer on a second substrate said thereof; and

the etching step of etching said porous layer while the second substrate side on which said porous layer is exposed is completely dipped into an etching solution, and ultrasonic waves are supplied, thereby exposing surface of the second substrate side,

the etching step changing a position of an ultrasonic source.

31. (Original) The method according to claim 28, wherein the etching solution used in the etching step is any one of

(a) hydrofluoric acid,

(b) solution mixture prepared by adding at least one of alcohol and hydrogen peroxide to hydrofluoric acid,

(c) buffered hydrofluoric acid,

(d) solution mixture prepared by adding at least one of alcohol and hydrogen peroxide to buffered hydrofluoric acid, and

(e) solution mixture of hydrofluoric acid, nitric acid, and acetic acid.

32. (Original) The method according to claim 28, wherein the removal step comprises exposing said porous layer by grinding, polishing, or etching said first substrate from a back surface.

33. (Original) The method according to claim 28, wherein the removal step comprises separating the first substrate side and the second substrate side at a boundary of said porous layer.

34. (Original) The method according to claim 28, wherein said non porous layer is a single-crystal silicon layer.

35. (Original) The method according to claim 28, wherein said non porous layer is made up of a single-crystal silicon layer and a silicon oxide layer formed on said single-crystal silicon layer.

36. (Original) The method according to claim 28, wherein said non porous layer is a compound semiconductor layer.

37. (Original) The method according to claim 28, wherein said second substrate is a silicon substrate.

38. (Original) The method according to claim 28, wherein said second substrate is a silicon substrate having a silicon oxide film formed on a surface to be bonded to the first substrate side.

39. (Original) The method according to claim 28, wherein said second substrate is a light-transmitting substrate.

Claims 40 and 41 (Canceled).